

CONFERENCES & MEETINGS

SPECIAL SESSION ON ECOLOGICAL AND ENVIRONMENTAL STATISTICS, 48TH SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE, HELD IN CAIRO, EGYPT, DURING 9–17 SEPTEMBER 1991

The Special Session on Ecological and Environmental Statistics (EES) was held on 17 September 1991 within the programme of the 48th Session of the International Statistical Institute in Cairo, Egypt, at the International Convention Center, Nasr City, Cairo, with the cooperation of the Egyptian Organizing Committee and the Central Agency for Public Mobilization and Statistics (CAPMAS). The Special Session on Ecological and Environmental Statistics (EES) was arranged at the initiative of the Italian Statistical Society and was jointly organized by Professor Raimondo Cagiano de Azevedo (University of Rome) and Professor Samir I. Ghabbour (Cairo University).

The Special EES Session was organized with the following objectives:

- 1) To show the present stage of advancement in the application of statistical methods for improved understanding of ecological and environmental problems.
- 2) To point out problems met by researchers in the application of statistical methods to ecological and environmental problems, including training and evaluation.
- 3) To encourage junior Egyptian staff in using statistics to solve ecological and environmental problems.

Case-studies were presented by Italian as well as Egyptian researchers from Alexandria, Tanta, Assiut (Aswan Branch), and Cairo, Universities, and also from the IBM Cairo Scientific Center. Subjects ranged from remote sensing to plant nutrition, and thence to analysis of vegetation patterns, down to the ecology of soil fauna populations. The Session was also attended by statisticians and ecologists from other countries, notably Canada and France.

Training and Awareness

The meeting concluded that there should be more stress on the training of young ecologists, more particularly for work in developing countries, which should comprise both multidisciplinary and interdisciplinary integration of various aspects of ecological and environmental sciences. Special attention should also be given to the interface of ecology with other parallel sciences, such as physiology. Ecologists should explore possibilities of identifying institutions and organizations that are, or could be, interested in this type of training, to promote its implementation. Postgraduate studies in statistical ecology are essential for young ecologists, and should be handled by joint teams of ecologists with sufficient competence in statistics, and statisticians with sufficient knowledge of the essence of ecological and environmental sciences.

Straightforward teaching of mathematics and classical statistics is not appropriate for ecology students; meaningful ecological applications are courses in biostatistics, multivariate analysis, and ecological modelling, but not restricted in their content and elaboration. In fact, a specially tailored curriculum of undergraduate and graduate courses that integrate biology and mathematics for applications in ecological research should be conceived, so that ecology students can really draw benefit from such integration. Several such courses — not only one — could be useful as flexible modules for different applications, but with a basic core.

Promotion of EES in Developing Countries

Problems related to lack of awareness about ecological and environmental statistics in developing countries were shown to need particular attention and the following suggestions were adopted by the meeting:

- 1) Raising awareness about EES among the developing world's population, especially through information media.
- 2) Introducing EES, with its various branches, into teaching curricula at all stages, with special attention given to seminars and conferences.
- 3) Training of personnel and qualifying them for EES, with the help of developed countries, international support, and cooperation organizations.
- 4) Establishing institutions provided with qualified personnel and modern equipment to enable them to carry out EES regularly and accurately.
- 5) Giving attention to sustainable development and to means of planning for it, as this will create the need for EES and will enhance their importance.
- 6) Application of sound environmental management, and promulgation of 'environmental impact assessment' and 'environmental risk assessment' laws and regulations, with a commitment to serious and thorough application of these laws.
- 7) Allowing EES to become part of the mechanism of environmental decision-making.

The deliberations of the Special EES Session should be continued and elaborated in the 49th ISI Session in Florence in 1993 and the 50th Session in Beijing.

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CONFERENCE ON ECOLOGICALLY SUSTAINABLE INDUSTRIAL DEVELOPMENT (ESID), HELD IN COPENHAGEN, DENMARK, DURING 14–18 OCTOBER 1991

In his opening statement at this international Conference on Ecologically Sustainable Industrial Development, which was organized by the United Nations Industrial Development Organization (UNIDO), its Director-General, Mr Domingo L. Siazon, Jr, called for a cleaner and better world, *inter alia* highlighting the important role that Nongovernmental Organizations (NGOs) could play.

The role of industry in fashioning environment and development can hardly be disputed. With modern technology at its disposal, industry is one of the crucial factors in bringing about development. In order to feed and clothe the world's soaring population, our expectations centre on major increase in agricultural and other industrial output. How can industry cope with vast increases in human population, yet at the same time pollute less?

This leading question set the backdrop for the ESID Conference, convened by UNIDO in Copenhagen during 14–18 October 1991, which gathered together representatives of some 100 different countries — half of them at ministerial level — and of numerous NGOs, INGOs (International Nongovernmental Organizations), and industry, for a week of deliberations on ESID (Ecologically Sustainable Industrial Development).

Besides approaching a definition of the ESID concept, the objective of the Conference was to draw up an agenda

for future work and assign roles to the various partners in the process. The Conference documentation contained working papers analysing the role of industry, governments, and international organizations. Another important objective was to try to assess the main foreseeable technical challenges and the solutions available for meeting them. This was done through a series of five technical papers, analysing the situation in as many industrial sectors, that were discussed in a series of specialist symposia which attracted considerable interest from technical experts.

Looming issues such as debt crises and overpopulation, keywords such as 'additionality' and 'conditionality', conflicts of interest between developed and developing countries — these were considered basic themes in international development. Although ESID was not the place for sweeping solutions, the opportunity to address Ecologically Sustainable Industrial Development within this framework, and define its place and priority, was useful.

The importance of this Conference on ESID lies not so much in the activities launched following its conclusions and recommendations, as in the manner in which it served to focus the attention of all the partners in industrial development — governments, industry, NGOs and INGOs — on common goals. The intention now is to give the term ESID — Ecologically Sustainable Industrial Development — a currency beyond the actual Conference. It is hoped that, by discussing the nature of the goals to strive for and duly assigning roles and strategies in overcoming the obstacles, more concerted action than hitherto will result. Useful partnerships have already been established between UNIDO and other organizations and individuals, and no doubt the joint efforts have created inspiration for future work.

Also, through the preparations that went on for more than a year before the Conference, UNIDO's capacity to address environmental aspects has greatly developed. The documentation prepared provides up-to-date analyses and data on the situation in industrial sectors and in the international community. This information, and the awareness of the issues aroused, will continue to have an effect long after the ESID Conference — both within UNIDO and widely outside.

Subsequently, UNIDO's General Conference in November endorsed the recommendations of ESID, and indicated its confidence in UNIDO to carry on the work. The ESID Conclusions and Recommendations will be UNIDO's main input to the UNCED Conference.

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INTERNATIONAL CONSULTATION ON PROTECTED
AREAS IN MOUNTAIN ENVIRONMENTS, HELD IN THE
HAWAII VOLCANOES NATIONAL PARK, ISLAND OF
HAWAII, USA, DURING 26 OCTOBER TO 3 NOVEMBER
1991

Mountain areas of the world are facing increasing pressures of inappropriate development, much of it planned by lowlanders. Formally designated 'protected areas' — such as national forests, controlled land-use

zones, and national parks — are among the best responses to achieving sustainable development. Forty-two scientists and land managers having mountain protected-area expertise in more than 30 countries world-wide were brought together in this experts' Consultation inspired by the East-West Center's Environment and Policy Institute. Coordinated by the undersigned, the locale of the Consultation was in Hawaii Volcanoes National Park on the Island of Hawaii. Co-sponsors were the World Conservation Union, the Woodlands Mountain Institute, and the US National Park Service.

Working groups produced materials for a pamphlet of guidelines on such themes as: climate change impacts and response, the sacred aspect of mountains, providing benefits to local landowners/land-users, water resources and mountains, biological diversity in high places, mountain parks across frontiers as peace parks, impacts of protected areas on cultures, and several others. A basic 'directory' of 432 protected areas in high mountains was produced, together with a list of 25 potential areas as immediate targets for protected-area establishment. A collection of the papers is being assembled for a theme-stressing publication.

A series of recommendations was prepared for presentation to the World Parks Congress in Caracas in February 1992 and subsequently to the UN 'Earth Summit' in Rio de Janeiro in June 1992.

Activity Coordinator was the undersigned, of the East-West Center, with partners Dr James Thorsell of IUCN and P.H.C. 'Bing' Lucas, the Chairman of IUCN's Commission on National Parks and Protected Areas.

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GLOBAL ASSEMBLY OF WOMEN AND THE ENVIRONMENT, HELD DURING 4–8 NOVEMBER 1991 IN MIAMI, FLORIDA, USA, FOLLOWED BY WORLD WOMEN'S CONGRESS FOR A HEALTHY PLANET, HELD IN MIAMI, FLORIDA, USA DURING 8–12 NOVEMBER 1991

It proved very difficult to integrate women's perspectives in the preparatory process of the United Nations Conference on Environment and Development (UNCED), to be held in Rio de Janeiro, Brazil, in June 1992. Women's NGOs made efforts from the very beginning, delivered statements, and also had government delegations mention their problem; but all without much success. Eventually, at the 3rd Preparatory Committee meeting, after much lobbying and with the help of many women members of delegations, the responsible Committee adopted a resolution taking into account women's views. However, some participants did not think this was sufficient, and decided to get the voice of the world's women on environment and development heard more effectively.

The Senior Women's Advisory Group on Sustainable Development of UNEP asked the World Network (World Women in Environment) to organize regional meetings, and also a Global Assembly. The Assembly was dedicated to demonstrating, to the world community, the capacity of women to achieve environmental management — that women possess the qualities of leadership and dedicated